Drop-Leaf Table | Popular Woodworking Magazine

Carl Wulff's furniture shop located at 145 Wade St. in downtown Cincinnati.

In our living room, we keep a mahogany table that I vaguely knew one of my ancestors had built. After I began my internship at this magazine, I became more interested in that table. I asked my paternal grandmother about the table, and she told me that my great-great-grandfather, Carl Edward Wulff, built it at his furniture shop in downtown Cincinnati about 1870. She even had a photograph of his shop dated 1878. In the picture you can see the simple sign that says "Furniture." With this proof, I knew that woodworking was definitely in my blood. Having the family tradition in mind, I set about building a slightly simplified facsimile. In fact, the joinery in this project is so simple that almost any beginner can do it.

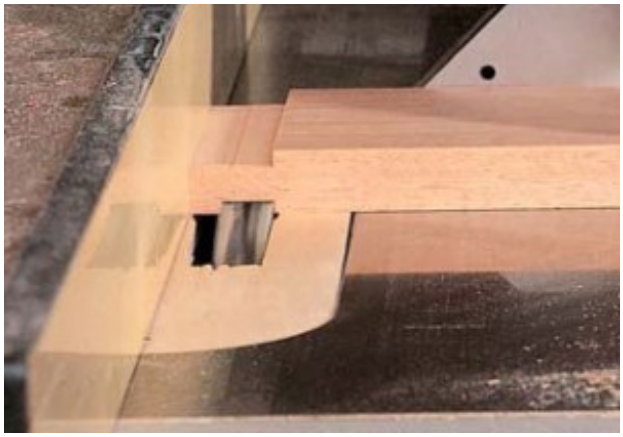
Start with the Basics

After cutting all your rough stock to length, surface your wood down to 3/4" thick (except for the legs). The original 19th-century table's top was only one board. You can still find mahogany in these widths, but I couldn't. To obtain the appropriate width, I had to glue up two boards for both the leaves and the tabletop. I used three biscuits at each joint to keep the boards aligned during glue-up. Also, if you can't get 2-1/4"-thick stock for the legs, ask for turning blanks at the lumber store instead; you might just get lucky.

Mortises, Tenons and Tapers

To cut the tenons, use a dado stack on the table saw. Reduce the tenon in thickness by 3/16" on each side.

The first step is to make mortise-and-tenon joints



where the aprons join the legs. I made the tenons using a dado stack on the table saw. Cut the shoulders as shown in the photo on the next page. Make the tenons 3/8" thick, 1" long and 3-1/4" wide. After cutting your tenons, cut a groove in the aprons for the tabletop fasteners, which will attach the top to the table's base. Make this slot by cutting a kerf in the aprons that's 7/16" down from the top edge. For a nice detail, I routed a bead on the bottom edge of the aprons.

The mortises on all the legs are made 1-7/16" from the inside for the short aprons and 7/16" from the inside for the long aprons as shown in the diagram below. Cut your mortises on the legs; I used a mortiser, but you can use a chisel or Forstner bit.

The original table had turned legs, but in order to simplify things, I tapered the legs. Tapering jigs for the table saw can be tricky, so I used a band saw to cut the tapers about 1/16" shy of my line and then cleaned up the cut on the jointer. The taper should start 1" below where the aprons end and result in a leg that tapers to one-half the original thickness. Remember: taper only the sides that have mortises.